## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all previous versions, and listings, of claims in the application:

## **Listing of Claims:**

π<sup>\*</sup>1 \*\* \*\* \*\* \*\*

- 1. (Currently Amended) A hybrid gene cDNA library having a plurality of plasmid vectors in which each vector comprises:
  - a DNA molecule with at least one selectable marker sequence; and
  - a sequence encoding a hybrid protein region, the hybrid protein region including:
    - a regulatable DNA sequence,
- a multiple cloning site lacking a translational termination sequence, the multiple cloning site located immediately 3' to the regulatable DNA sequence,
- a cDNA molecule having a 5' untranslated region and a translation initiation codon, the cDNA molecule inserted in the multiple cloning site; and
- a DNA sequence encoding at least one GAL4 <u>binding domain</u> common peptide <u>or at least one GAL4 activation domain common peptide</u>, and lacking a translation initiation codon, the DNA sequence located 3' to the multiple cloning site, and
- a sequence which encodes a transcriptional termination sequence placed immediately 3' to the DNA sequence encoding at least one GAL 4 <u>binding domain</u> common peptide <u>or at</u> least one GAL4 activation domain common peptide;

wherein the plurality of plasmid vectors contain a plurality of cDNA molecules generated using random primers and enriched for 5' cDNA from represented genes as compared to cDNA generated using polyT primers;

wherein the hybrid protein region lacks a translation initiation codon 5' of the cDNA; and

wherein at least two of the plurality of plasmid vectors contain different cDNA molecules; and

wherein at least one of the plurality of plasmid vectors is operable in a GAL4 yeast two-hybrid assay.

2. (Original) The hybrid gene cDNA library of claim 1 wherein each vector additionally comprises one or more origins of replication active in bacteria cells.

3. (Original) The hybrid gene cDNA library of claim 1, wherein each vector additionally comprises one or more origins of replication active in yeast cells.

### 4. (Cancelled).

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- 5. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the regulatable DNA sequence comprises the rat Glucocorticoid Response Element.
- 6. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the regulatable DNA sequence an Estrogen Response Element.
- 7. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the common peptide comprises all or portions of the GAL4 yeast transcriptional activator and six successive histidine residues.
- 8. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the common peptide comprises all or portions of the GAL4 yeast transcriptional activator and a nuclear localization sequence from the SV40 virus.

#### 9. (Cancelled).

- 10. (Original) The hybrid gene cDNA library of claim 1, wherein each of the vectors additionally comprises one or more origins of replication active in yeast cells and one or more origins of replication active in bacterial cells, wherein at least one yeast origin of replication is derived from the natural 2-micron yeast plasmid.
- 11. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the selectable marker sequences comprise the bacterial ampicillin resistance gene and the yeast TRP 1 nutritional auxotrophy gene.
- 12. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the selectable marker sequences comprise the bacterial kanamycin resistance gene and the yeast URA3 nutritional auxotrophy gene.

13. (Original) The hybrid gene cDNA library of claim 4, wherein the transcriptional termination sequence is derived from the yeast ADH 1 gene.

14-22. (Cancelled).

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- 23. (Previously Presented) The hybrid gene cDNA library of claim 1, wherein the common peptide comprises all or portions of the GAL4 yeast transcriptional activator.
  - 24. (Cancelled).
  - 25. (Currently Amended) A plasmid vector comprising:
  - at least one selectable marker sequence; and
  - a sequence encoding a hybrid protein region, the hybrid protein region including:
  - a regulatable DNA sequence,
- a multiple cloning site lacking a translational termination sequence, the multiple cloning site located immediately 3' to the regulatable DNA sequence,
- a cDNA molecule having a 5' untranslated region and a translation initiation codon, the cDNA molecule inserted in the multiple cloning site,
- a DNA sequence encoding at least one GAL4 <u>binding domain</u> common peptide <u>or at</u> <u>least one GAL4 activation domain common peptide</u>, and lacking a translation initiation codon, the DNA sequence located 3' to the multiple cloning site, and
- a sequence which encodes a transcriptional termination sequence placed immediately 3' to the DNA sequence encoding at least one GAL 4 <u>binding domain</u> common peptide <u>or at</u> least one GAL4 activation domain common peptide;

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wherein the **plurality of** plasmid vectors contains a **plurality of** cDNA molecules generated using random primers and enriched for 5' cDNA from represented genes as compared to cDNA generated using polyT primers; **and** 

wherein at least two of the plurality of plasmid vectors contain different cDNA molecules.; and

wherein at least one of the plurality of plasmid vectors is operable in a GAL4 yeast two-hybrid assay.

- 26. (Previously Presented) The plasmid vector of claim 25 further comprising one or more origins of replication active in bacteria cells.
- 27. (Previously Presented) The plasmid vector of claim 25, further comprising one or more origins of replication active in yeast cells.

### 28. (Cancelled).

- 29. (Previously Presented) The plasmid vector of claim 25, further comprising one or more origins of replication active in yeast cells and one or more origins of replication active in bacterial cells, wherein at least one yeast origin of replication is derived from the natural 2-micron yeast plasmid.
- 30. (Currently Amended) The plasmid vector of claim 25, wherein the common peptide comprises all or portions of the GAL4 yeast transcriptional activator activation domain.
- 31. (Currently Amended) The plasmid vector of claim 25, wherein the common peptide comprises all or portions of the GAL4 DNA-binding domain.

# 32. (Currently Amended) A plasmid vector comprising:

at least one selectable marker sequence; and

. . .

a sequence encoding a hybrid protein region, the hybrid protein region including:

a regulatable DNA sequence,

a multiple cloning site lacking a translational termination sequence, the multiple cloning site located immediately 3' to the regulatable DNA sequence,

a cDNA molecule having a 5' untranslated region, a translation initiation codon, and a sequence encoding a protein region operable to bind which interacts with another protein in a <u>GAL4</u> yeast[[-]]two\_hybrid assay, the cDNA molecule inserted in the multiple cloning site,

a DNA sequence encoding at least one GAL4 <u>binding domain</u> common peptide <u>or at least one GAL4 activation domain common peptide</u> and lacking a translation initiation codon, the DNA sequence located 3' to the multiple cloning site, and

a sequence which encodes a transcriptional termination sequence placed immediately 3' to the DNA sequence encoding at least one GAL 4 <u>binding domain</u> common peptide <u>or at least one GAL4 activation domain common peptide</u>;

wherein the **plurality of** plasmid vectors contains a **plurality of** cDNA molecules generated using random primers and enriched for 5' cDNA from represented genes as compared to cDNA generated using polyT primers; and

wherein the hybrid protein region lacks a translation initiation codon 5' of the cDNA.

wherein the plasmid vector is operable in a GAL4 yeast two-hybrid assay.